Studies of the ecological and economic consequences of the 1998 Florida wildfires: An interagency approach.

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ABSTRACT: Within a six-week period, wildland fires swept across 500,000 acres of Florida's lands. Over 1700 fires ignited leaving behind an enormous path of destruction on federal, state and private lands. As the smoke clears, many issues arise regarding the ecological and economic consequences of these wildland fires. An Interagency Florida Fire Science team made up of representatives from federal and state agencies and private organizations has been formed to address some of the immediate issues following the Florida fires. This team will: 1) determine the effects of fuel treatments on wildfire severity as it affects overstory mortality, 2) correlate levels of daily fire behavior to Lavdas-Dispersion and Haines Indices, 3) assess the status and response of plant species of concern and exotic species, 4) compare actual fire behavior to predicted fire behavior, 5) develop GIS-based maps showing selected fuel conditions and wildfire variables to assess landscape fragmentation and potential fire damage under an array of weather conditions, 6) determine relative abundance and timing of pine foraging insects along a fire intensity gradient and monitor insect infestation rates and tree mortality responses, 7) determine the effects of fuel treatments on wildfire behavior from a suppression and safety standpoint as fires moved across the landscape and into residential areas, 8) compare short-term economic impacts of catastrophic fire with and without prior fuel treatments and provide models to assist managers and policy makers in fuels reduction programs and 9) quantify the utility of commonly used home protection strategies. The interagency team will collect and analyze data to address these questions in the upcoming year with a final report summarizing all results available on the internet in January 2000.

